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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,268	06/23/2005	Mitsuo Usami	843.45150X00	1433
20457 A NITONIEL LI	7590 11/23/2007 TEDDV STOUT & KD A	EXAMINER		
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET			SYED, NABIL H	
SUITE 1800 ARLINGTON, VA 22209-3873			ART UNIT	PAPER NUMBER
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			11/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

·	Anglication No.	(Applicant/o)				
•	Application No.	Applicant(s)				
Office Astinus Communication	10/540,268	USAMI, MITSUO				
Office Action Summary	Examiner.	Art Unit				
	Nabil H. Syed	2612				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state that the provided period for reply will be provided period for reply wil	DATE OF THIS COMMUNION 1.136(a). In no event, however, may a rood will apply and will expire SIX (6) MON tute, cause the application to become AB	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 16	October 2007.	·				
2a)⊠ This action is <b>FINAL</b> . 2b)□ T	This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allow	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		e e e e e e e e e e e e e e e e e e e				
4) Claim(s) 7-24 is/are pending in the application	on.					
4a) Of the above claim(s) 1-6 is/are withdraw	4a) Of the above claim(s) <u>1-6</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>7-24</u> is/are rejected.	6)⊠ Claim(s) <u>7-24</u> is/are rejected.					
· · · · · · · · · · · · · · · · · ·	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Exam	iner.					
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) s)/Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		nformal Patent Application				

#### **DETAILED ACTION**

1. The following is a final office action on merits. Amendments received on 3/30/07 have been entered. Claim 6 has been cancelled. Claims 7-24 are pending.

### **Specification**

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 19-21 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As of claim 19-21, the term "second memory" is not defined in the Application filed. In the specification applicant define only one memory 16 having first random number 11 and second random number 22 (see fig. 2, and page 3, line 26 through pages 4, lines 1-3).

For examination purposes it is assumed that "second memory" is --second information--

# Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 7-9, 14, 15, 19-21, 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Bandy et al. (6,002,344).

As of claim 7, Bandy discloses an IC tag (via a RFID tag 102, see fig. 3) for transmitting first information to a reception unit, comprising: a memory which memorizes the first information (via tag having the tag ID as the first information) and second information (via tag 102 having a manufacture number; see col. 3, lines 8-17) (note: it is inherent that RFID tag have memory to store the identification number and other data to transmit to the reader) (see col. 3, lines 8-18); and a counter in which its count value indicates a bit address of the first memory (via counter/shift register 312, see fig 3) (also see col. 5, lines 4-8) (note: Bandy discloses that the tag transmits it tag ID when the value in the counter is same as of tag ID, since the ID is stored in the memory and the counter is indicating the value of the ID, Bandy discloses a counter in which its value indicates a bit address of the memory; see col. 5, lines 4-9) (In the office action, below the tag ID, manufacture number and the lot number can be used as first information and second information and third information since claims does not specify which information is indicating the tag ID number or other numbers)

wherein the IC tag carries out count-up or count-down of a count value of the counter according to a clock signal received from the reception unit (via counter 312 increment

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its count when it receives the clock signal from the reader unit; see col. 1, lines 63-67) and the IC tag sets the second information of the second memory as an initial value of the counter and after the count value of the counter reaches a specified code, the first information stored in the bit address indicated by the count value is sent out to the reception unit successively (via tag transmitting the tag ID or manufacture number or lot number when the counter value matches any one of the tag ID or manufacture number or lot number (see col. 7, lines 12-33; also see col. 5, lines 4-20).

As of claim 8, Bandy discloses that the memory memorizes the third information (via tag 102 memorizing a lot number; see fig. 3) and the IC tag sets either the second information or the third information as an initial value of the counter (note: Bandy discloses that if the third tag identifier does not resolve the contention, further reading can be done by adding more identification numbers in the tag (see col. 4, lines 7-12).

As of claim 9, Bandy discloses that the IC tag selects the second information or the third information by means of the mode switching portion and sets it as an initial value of the counter (via instruction interpreter 312 indicating which of the three numbers (tag ID, manufacture, lot number) are requested by the reader by telling the tag which of the read cycle is being performed) (see col. 5, lines 22-27).

As of claim 14, Bandy discloses a reading method for reading the first information from an IC tag having a memory (note: it is inherent that RFID tag have a memory to store the identification number and other data) which memorizes first information and second information (via Bandy discloses that a tag 102 have more than two information numbers, a tag ID number, a manufacture number and a lot number; see col. 3, lines 8-

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18; see fig. 3), and a counter (via a counter/shift register 312, see fig 3) in which a count value thereof indicates a bit address of the first memory to the reception unit (via conter/shiftregister transmitting the response signal to the reader unit, during first read cycle, which is equal to the tag ID; see col. 7, lines 1-30), comprising: transmitting a clock signal from the reception unit to the IC tag (via tag reader 104(see fig. 1,) transmitting a clock signal; see col. 1, lines 63-67). setting the second information as an initial value of the counter (note: Bandy discloses that during the first read cycle clock increment instruction from the reader unit makes the tag to increment the counter 312 until the output matches the tag ID, see col. 6, lines 64-67 through col. 7, lines 1-11); performing count-up or count-down of a count value of the counter according to the clock signal (see col. 1, lines 63-67); and after the count value of the counter reaches a specified code, transmitting the first information stored in the bit address of the first memory indicated with the count value successively to the reception unit (via tag transmitting the tag ID or manufacture number

As of claim 15, Bandy discloses that memory memorizes the third information and the second information is selected according to the mode switching signal and set up in the IC tag as an initial value of the counter (via sending the first read, second read and third read instruction to read tag ID, manufacture number and lot number respectively see col. 13, linesn14-24).

or lot number when the counter value matches any one of the tag ID or manufacture

number or lot number (see col. 7, lines 12-33; also see col. 5, lines 4-20).

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As of claim 19-21, Bandy discloses the IC tag wherein the counter and the second memory have the same bit number (via counter/shiftregister 312 and Tag ID having the same value, see col. 5, lines 5-9).

As of claim 22-24, Bandy discloses the IC tag wherein the first information is comprised of at least identification number and an error detection code for detecting an error in the identification number (note: Bandy discloses this function by tag having a tag ID and a error code in case the contention occurs. For example tag can transmit its error-code using checksum (see col. 3, lines 48-55) and wherein the second information is a random number (via storing the tag ID's or manufacture number and lot number at the time of manufacturing; see col. 3, lines 1-17).

### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 10, 12, 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bandy et al. (6,002,344) and in view of Raimbaul et al. (6,177,858).

As of claim 10, Bandy discloses all the elements of the claimed invention as

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mentioned in claim 9 above abut fails to explicitly disclose that the mode switching portion is a flip-flop.

Raimbault discloses an IC tag (via an electronic tag, fig. 1) wherein the mode-switching portion is a flip-flop (via electronic tag having a flip-flop in the logic circuit 4 to change the state of the tag; see fig.1, also see col. 7, lines 64-67 and col. 8, lines 1-7).

From the teaching of Raimbaul it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tag of Bandy to include a flip-flop in order to make the transponder easily switch between the read mode and transmit mode (see col. 11 and 18).

As of claim 12, Bandy discloses the IC tag wherein the counter and the second information have the same bit number (via counter/shiftregister 312 and Tag ID having the same value, see col. 5, lines 5-9).

As of claim 13, Bandy discloses the IC tag wherein the first information is comprised of at least identification number and an error detection code for detecting an error in the identification number (note: Bandy discloses this function by tag transmitting its ID and error code. For example tag can transmit its error-code using checksum (see col. 3, lines 48-55).

9. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bandy et al (6,002,344) and in view of Chan (5,550,547).

As of claims 16-17 Bandy discloses all the elements of the claimed invention as mentioned in claim 7 above but fails to explicitly disclose that the specified code is zero.

Chan discloses an IC tag (via RF tag 120, see fig. 3) wherein the transponder transmits the data when the counter (via state counter 432) of the tag is at predetermined value, which is zero (see col. 6, lines 19-23).

From the teaching of Chan it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the IC tag of Bandy to have the tag transmit its data when the specified value of the counter is zero in order to make the interrogation process simpler and reduce the chances of collision.

10. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bandy (6,002,344) and Raimbault (6,177,858) as applied to claim 10 above, and further in view of Chan (5,550,547).

The combination of Bnady and Raimbault discloses all the elements of the claimed invention as mentioned in claim 10 above, but fails to explicitly disclose that the specified code is zero.

Chan discloses an IC tag (via RF tag 120, see fig. 3) wherein the transponder transmits the data when the counter (via state counter 432) of the tag is at predetermined value, which is zero (see col. 6, lines 19-23).

#### Response to Arguments

11. Applicant's arguments filed 10/16/07 have been fully considered but they are not persuasive. Applicant argues that counter/shiftregister of Bandy "does not function as a memory address counter indicating a memory address of a memory". The Examiner respectfully disagrees. Applicants are reminded that during examination, claims are

given their "broadest reasonable interpretation . . . ." *In re Morri*s, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Prat*er, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Therefore, under the broadest reasonable interpretation standard, the Examiner maintains her interpretations. Since the tag 102 of Bandy transmit the response signal when the value of the counter is equal to tag ID (tag ID's are stored in the memory), it is indicating the bit address of memory, namely the tag ID number, the manufacture number and the lot number. Bandy further discloses that counter/clock 406 of the reader has the same number of counts as counter 32 of tag, and when a tag sends a response signal it does not have to transmit the tag ID, just a simple response signal without any information would be enough for the reader to know the tag ID because the counts in the counter 406 of the reader are the same as counts in the counter 312 of tag. This definition shows that counter is indicating the memory address by indicating the tag ID number (see col. 7, lines 1-33).

As per applicant argument that "the counter counts clocks from a reception unit without the need for commands, instructions or a decoding unit." The Examiner respectfully disagrees. These limitations are not recited in the claim. Claim 7 and 14, recite that "the IC tag carries out count-up or count-down of a count value of the counter according to a clock signal received from the reception unit." Bandy discloses that tag reader transmits a wake-up signal followed by at least one clock signal. Each tag increments a first tag count in response to the clock signal received from the tag reader (see col. 1, lines 63-67). Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### Conclusion

**12. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil H. Syed whose telephone number is 571-270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on (571) 270-3033. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

<sup>&</sup>lt;sup>1</sup> io See also MPEP §2111; *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995); *In re Etter*, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985) (en banc).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nabil H Syed Examiner Art Unit 2609

N.S

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